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Government Policy for the Stable Growth of the Sharing Economy

Min Jung Kim, Fellow at KDI

“The sharing economy is expected to contribute to the enhancement of social welfare with its wide range of benefits, including creation of new transactions and promotional and market testing opportunities, if risk factors such as crowding out of existing transactions and transaction and social risks can be properly controlled. Accordingly, an institutional framework is needed to support the stable growth of the sharing economy and the unique characteristics of non-professional, peer-to-peer transactions should be reflected in tandem with regulatory equity between existing and sharing economy suppliers. For this, transaction volume-based regulations are recommended. Furthermore, to secure regulatory effectiveness and to alleviate transaction risks, the pertinent obligations must be imposed on sharing platforms.”

I . Introduction

The “sharing economy,” a term used to describe the renting of private assets online to others, has recently attracted a great deal of attention. As the economy slows, population ages and the number of single-person households rises, it has achieved explosive global

* Based on Kim, Min Jung, Hwa Ryung Lee and Sunjoo Hwang, *An Economic Analysis of the Sharing Economy: Benefits, Concerns and Policy Implications*, Research Monograph 2016-11, Korea Development Institute, 2016 (in Korean).

growth since the global financial crisis with increasing demand for new income sources and sharing. Indeed, two sharing economy titans, Airbnb and Uber, were valued at \$30 billion and \$80 billion as of 2016, outranking global hotel chains like Hilton and traditional carmakers like Volkswagen and GM.¹⁾ Considering that the assets required for transactions are not owned by the sharing economy firms, their growth is quite surprising.

Peer-to-peer transaction using privately owned assets is nothing new, but it has increased dramatically in volume driven by technological advances, typified by the internet and smart devices—growing into an industry. While the proliferation of the sharing economy is now an undeniable trend, it is accompanied by both expectations and concerns and raises many issues with respect to the implementation of a government system due to differences with existing industries.

This study closely analyzes key issues of the sharing economy, and based on the results, implications are presented for government policies to support its stable growth. In particular, theoretical and empirical analyses of the benefits and concerns of the sharing economy were conducted to derive institutional measures that could help to achieve the expected benefits and respond appropriately to any concerns.

II . Concept and Current Status of the Sharing Economy

As of yet, there is no clear-cut definition for the sharing economy. In this study, it is defined as an economy in which consumers of a particular service and suppliers who own idle assets that create a particular service become involved in market transactions through the mediation of an ICT-based sharing platform. As shown in [Figure 1], suppliers and consumers search for each other via a platform, and when a match and deal are made, the former provides the latter with the access rights to the idle asset at the market price; both are also charged with a brokerage fee for their use of the platform.

What should be noted here is the reference to idle assets, which are assets that the owners have acquired for their own use but have been left unused. In other words, assets that were bought for the purpose of renting are not regarded as idle assets. Hence, in the sharing economy, transactions basically occur between non-professional individuals. The definition may seem somewhat limited,²⁾ but the focus has been placed on the transaction pattern which differs from that seen in the existing service industry and e-commerce, and so requires a new policy approach. <Table 1> shows that various types of tangible and intangible assets are being utilized in the sharing economy.³⁾ All deals between consumer and supplier are

1) Bloomberg, “Uber and Airbnb, It's Time to Get Real,” 2016. 11. 7.

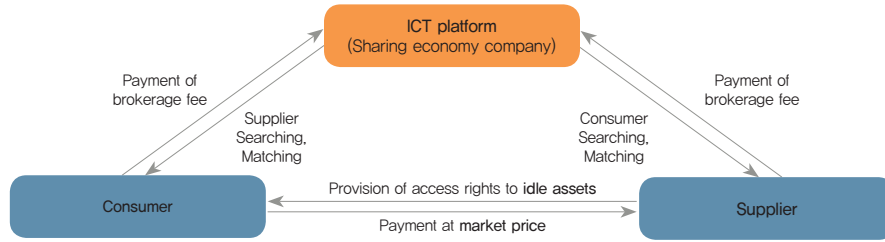
2) According to the definition above, companies that hold large quantities of assets directly and rent them out to consumers, i.e., B2C-type platforms are not included.

3) Besides, types vary including durable goods rental brokerage (clothing, toys, musical instruments, etc.) and even hybrid (combination of various types).

There is increasing demand for in-depth analysis of and policy response to the sharing economy which is growing fast on the back of technological advances.

Within the concept of the sharing economy, idle assets have great significance. The sharing economy basically involves transactions between non-professional peers.

[Figure 1] Sharing Economy Definition



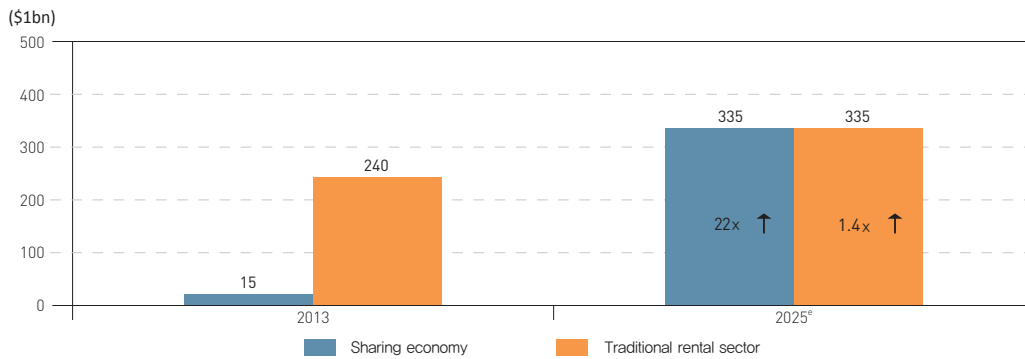
Source: [Figure 1-1] from Kim, Lee and Hwang (2016).

<Table 1> Major Sectors of the Sharing Economy

Sector	Idle assets	Consumer	Supplier
Accommodation	Vacant house or room	Guest	Host
Car	Idle car, spare time	Passenger	Car owner
Finance	Surplus money	Fundraiser	Investor
Space	Idle space, idle shop	Those who need space	Space holder
Talent	Spare time, labor, intellectual property	Those who need talent	Talented individual

Source: <Table 1-3> from Kim, Lee and Hwang (2016).

[Figure 2] Size of the Sharing Economy



Source: PwC (2014).

conducted online and the actual supply and use of the ‘service’ are mostly offline.

Official data on the size of the entire sharing economy is currently lacking. However, according to PwC (PricewaterhouseCoopers), sharing economy companies around the world raked in \$15 billion in revenue in 2013, and are expected to earn \$335 billion by 2025 (Figure 2). Specifically, while the sharing economy revenue accounted for a mere 6% of the traditional rental sector in 2013, it is expected to grow to 100% by 2025.⁴⁾ In Korea’s

4) According to PwC (2014), the sharing economy consists of peer-to-peer finance, online staffing, accommodation sharing, car sharing and music/video streaming while the traditional rental sector consists of equipment rental, B&B and hostels, and car, book and DVD rentals.

case, there has been a sharp rise in domestic startups— benchmarked on successful global sharing businesses—based on its high smartphone penetration and SNS use rates, but its sharing economy is still in the rudimentary stages and the majority of companies are small in size.

III. Expected Benefits from the Sharing Economy

1. Creation of New Transactions

Primary benefits expected from the sharing economy are creation of new transactions and resulting improvements in the welfare of sharing economy participants.

The sharing economy contributes to enhancing the welfare of the participants by creating new transactions that are based on the efficient use of underused assets, made possible by the reduction of transaction costs using ICT technology. Consumers can enjoy low prices, diverse options and better convenience while suppliers can earn additional income thanks to low entry barriers. In particular, it can also have distributive value by offering low-income households/individuals opportunities to take part as suppliers. Meanwhile, sharing platforms profit by receiving brokerage fees for matching consumers and suppliers.

A survey⁵⁾ of about 3,000 Koreans regarding their awareness of and experience with the sharing economy found that certain psychological factors are present such as curiosity about the sharing economy, but as aforementioned, participants are motivated strongly by the expected benefits; low price for consumers and additional income for suppliers (Table 2). Respondents also chose diverse options and items related with better convenience and efficiency—which all contribute to improving consumer welfare—as the main reason for their participation.

<Table 2> Reasons for Participating in Sharing Economy Transactions

(%)

Accommodation sharing				Car sharing		Crowdfunding			
Consumer		Supplier		Consumer		Consumer		Supplier	
Low price	58.5	Additional income	37.8	Low price	42.2	Curiosity	38.1	Appealing backstories or business ideas	49.6
Cultural experience	34.4	Curiosity	36.4	Curiosity	35.4	Interaction with investors	29.3	Curiosity	35.8
Curiosity	32.7	Trust in platform	20.3	Recommendation by friends or reviews	34.4	No other channels possible	26.5	Various investment opportunities	25.5
Diverse selection	27.0	Abundant guest information	19.6	Convenience	27.0	Short fundraising period	24.2	High return	25.5
Recommendation by friends or reviews	20.9	Low user fee	18.9	Service quality	26.0	Low price (interest rate)	20.0	Short payback period	15.6

Note: 1) Multiple answers (3 max.) were allowed.

2) Individuals are not allowed to participate as a car sharing supplier in Korea, and hence no survey information on the supplier side is available.

3) Table lists only five most chosen answers.

Source: <Table 1-32>, <Table 1-33> and <Table 1-34> from Kim, Lee and Hwang (2016).

2. Other expected benefits

Businesses participating in the sharing economy can also expect promotional and market testing effects. In the rudimentary phase of business, participants are given opportunities to promote and test new goods or business ideas without incurring substantial costs. These benefits are highly expected in the sectors of crowdfunding and space and talent sharing; some of which have been realized. Indeed, <Table 2> shows that 30% of consumers in crowdfunding chose ‘interaction with investors and testing and improving business ideas via such interactions’ as their main reason for participation while 50% of suppliers chose ‘appealing backstories and business ideas.’

In addition, the fact that actual provision and use of services occurs offline in most sectors of the sharing economy means that region-based transactions could help stimulate the local economy. Take Yeosu and San Francisco for example. Both used to be challenged by the lack of accommodation for travelers. However, as BnBHero (Korea) and Airbnb (US) started offering accommodation sharing services, the two cities were able to secure enough accommodation to host the World Expo in 2012 and Super Bowl 50 in 2016, respectively. Other than economic efficiency, the sharing economy is also expected to reduce environmental costs. In particular, car sharing services such as carpooling could reduce air pollutant emissions. Fundamentally, contributions to environmental sustainability can be expected in all sectors of the sharing economy as it helps save finite resources by increasing the utilization rate of produced assets.

Businesses participating in the sharing economy can also expect promotional and market testing effects.

Other expected benefits include vitalization of local economy and reduction in environmental costs.

IV . Concerns in the Sharing Economy

1. Conflict with Existing Businesses: Crowding out of Existing Transactions and Regulatory Arbitrage

One of the most marked issues in the process of introducing the sharing economy is the conflict with existing business sectors. As sharing economy transactions substitute certain existing transactions providing similar services, this will likely gnaw at the profits of incumbent businesses. Out of this concern, the existing accommodation and taxi industries are strongly opposed to accommodation and car sharing services. The aforementioned survey confirms that a certain degree of the crowding out effect is taking place in existing businesses. <Table 3> shows the impact of the sharing economy on traditional

The sharing economy could crowd out some existing transactions that provide similar services.

5) The survey was conducted online on 3,063 respondents using the Macromill Embrain panel, from Oct. 24 to Nov. 7 2016. Respondents were limited to those aged 19 and older and to those familiar with at least one sector of the sharing economy (e.g. accommodation sharing, car sharing and crowdfunding) or such companies. Respondents were classified into non-participants, consumers and suppliers for each sector. Refer to Kim, Lee and Hwang (2016) for further details.

<Table 3> Impact of the Sharing Economy on Traditional Transactions

(Q: Which type of existing transaction did you mainly reduce for sharing transactions?)

(%)

Accommodation sharing consumers		Car sharing consumers		Crowdfunding suppliers	
Type	%	Type	%	Type	%
Hotel	33.6	Public transportation	29.8	Bank saving	38.0
Bed & Breakfast / Pensions / Guest house	31.6	Taxi	23.2	Stock	26.0
Motel / Inn	12.4	Own car	23.0	Fund	11.0
Resort / Condo	11.2	Rented car	12.0	Derivatives / Bond / FX	10.0
Did not reduce	11.2	Did not reduce	12.0	Did not reduce	40.7

Note: 1) The survey was conducted on the type of participants who are given a certain or high level of autonomy to choose between sharing and existing transactions; consumers in accommodation and car sharing and suppliers in crowdfunding.

2) As for crowdfunding suppliers, multiple answers (2 max.) were allowed.

Source: Kim, Lee and Hwang (2016).

<Table 4> Estimated Impact of Accommodation Sharing on the Hotel Industry

		Lee and Kim (2016)	Zervas <i>et al.</i> (2016)	Neeser (2015)
Analysis object	Room sales	-0.16 **	-0.39 ***	-0.06
	Room price	-0.13 ***	-0.19 ***	-0.12 **
	Room occupancy rate	-0.04	-0.05 *	-0.02
Region		Korea	Texas, US	Norway, Finland, Sweden
Period		2010-2014	Jan. 2008-Aug. 2014	Jan. 2004-May 2015

Note: 1) Figures for each analysis object are calculated results from a regression analysis on the objects used as dependent variables and the number of Airbnb-listed suppliers used as one of explanatory variables. The figures show changes (%) in each dependent variable when the number of Airbnb-listed suppliers increases by 10%.

2) ***, ** and * denote significance levels of 1%, 5% and 10%, respectively.

Source: <Table 3-6> and <Table 3-7> from Lee and Kim (2016).

transactions. When asked which type of existing transactions they have reduced mainly as using sharing services, almost 90% of accommodation and car sharing consumers, respectively, answered that they did reduce some existing transactions. In addition, about 60% of crowdfunding suppliers said they invested less in other financial means after participating in crowdfunding. The degree of substitutability in crowdfunding seems comparatively smaller⁶⁾ than in other areas, but its impact has been confirmed.

The accommodation sharing business has already achieved certain growth, and several attempts have been made to quantitatively analyze its impact on the accommodation industry, centering around the prominent Airbnb. This study also conducted an empirical analysis using Korea's real data. As summarized in <Table 4>, for every 10% increase in the supply of accommodation facilities via Airbnb, there was a loss of approximately 0.16%

6) <Table 2> shows that in crowdfunding, more consumers chose 'interaction with investors and verifying and improving business ideas via such interaction' and 'no other channels possible' over 'low price (interest rate),' and much more suppliers chose 'appealing backstories or business ideas' and 'various investment opportunities' as their main reason for participation. This implies that there is the possibility crowdfunding will differentiate from other areas and, rather than crowding out the existing financial market, will eventually help expand the entire market.

in the hotel industry's room sales.⁷⁾ Subsequently, the growth of Airbnb seems to have had an insignificant impact on the occupancy rate of hotels, implying that it is, in fact, the reduction in room prices that has affected hotel industry sales. When the analysis was confined to cities such as Seoul, Busan, Jeju and Gangwon, where most of the increased accommodation supply via Airbnb is located, the loss in room sales doubled to mark 0.33%, which is similar to the results from Zervas *et al.* (2016)'s analysis of Texas, US.

These findings imply that concerns about existing business profits are not entirely groundless, but this is not a problem solely limited to the sharing economy. Every innovation arrives with some disruption to the traditional industry. However, the negative impact on existing industries can devolve into fundamental issues when regulations on existing businesses are not applied fairly to new sharing economy suppliers or platforms.⁸⁾ For instance, many 'hosts' on accommodation sharing platforms are not officially registered business operators, and hence, they are not subject to safety and tax-related regulations, unlike existing accommodation suppliers. In fact, some even argue that the sharing economy is not a special innovation but was rather formed and grew by taking advantage of regulatory loopholes. Indeed, if the sharing economy is distorting competition by exploiting regulatory arbitrage while providing low quality service, this may lead to the qualitative decline of the overall market and deterioration in social welfare. Hence, the government must take into consideration regulatory equity when formulating sharing economy policies.

The crowding out of existing transactions will exacerbate when regulations are applied unfairly to suppliers from existing and sharing businesses.

2. Transaction Risks and Social Safety Problems

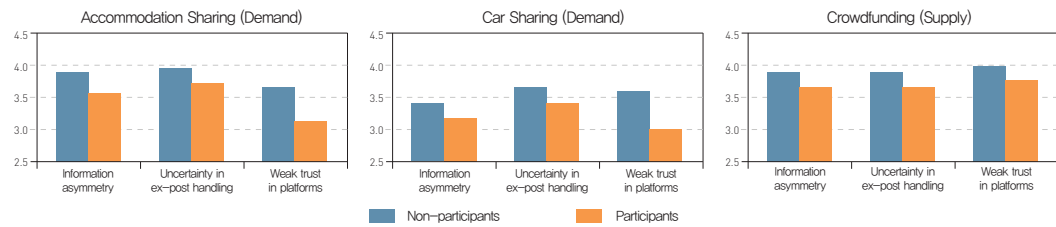
In most cases, the sharing economy involves non-face-to-face transactions of nonstandardized services between unspecified individuals, meaning there exist several transaction risks. Above all, due to high information asymmetry, consumers find it difficult to determine service quality while providers have difficulties in knowing and observing the consumer. This could lead to moral hazard, and depending on the sector, could entail property damage, criminal activity (theft, sexual violence, etc.), traffic accidents, default and so on. Further still, in the event of an actual occurrence of a transaction risk, dealing with the situation may be problematic as the current institutional foundations are too weak to provide concrete solutions such as insurance coverage or legal protection. There are also problems with trust in sharing platforms as they play a significant role in mediating the transfer of money and information.

The sharing economy encompasses several transaction risks including information asymmetry, uncertainty in ex-post handling and weak trust in platforms.

7) Refer to Lee and Kim (2016) for further details. This analysis used the total number of accommodation facilities posted on Airbnb's website, meaning that hosts with no actual transactions were also included. Hence, there are limitations. The same is true for other studies in <Table 4>. The volume of transactions of Airbnb's accommodations is important to conduct accurate analysis on the impact of Airbnb, but instead, proxy variables were used here due to the limited data availability.

8) If existing suppliers are socially underprivileged, the decline in their welfare could be a problem in itself, and hence policy consideration may be needed.

[Figure 3] Concerns in the Sharing Economy: Comparing the Recognition of Transaction Risks



Note: 1) Respondents were asked to express their recognition of each concern factor on a scale of 1 (not worried) to 5 (very worried) and the results were averaged according to participation experience. Questions on respective concern factors were specified by sector and participation type.
 2) Results are shown for the type of participants who are given a certain or high level of autonomy to choose between sharing and existing transactions; demand in accommodation and car sharing and supply in crowdfunding.
 3) As for demand-side results, respondents were asked to assume that they were participating in each area as a consumer and to answer questions regarding their recognition of each concern factor as a consumer. The responses were then compared between those with prior experience as a consumer (participants) and those without (non-participants); the same applies for the supplier.
 Source: <Table 1-27> and <Table 1-28> from Kim, Lee and Hwang (2016).

Negative external effects could be triggered, marring social safety.

If the sharing economy triggers negative external effects beyond the scope of the participants, it could even endanger social safety: in accommodation sharing, the negative external effects could include noise pollution, fire and housing instability;⁹⁾ in car sharing, there could be more car accidents; and in crowdfunding, there could be the risk of large-scale financial insolvency.¹⁰⁾

Survey respondents were asked to assume the role of consumer or supplier in each sector of the sharing economy to see how they recognized the severity of the transaction risks, and [Figure 3] compares the results according to participation experience. Regarding all the transaction risks (information asymmetry, uncertainty in ex-post handling and weak trust in platforms) in all of the sectors, non-participants expressed higher level of concern than participants, which suggests that people's recognition of concern factors is correlated with their decision to participate in the sharing economy. The comparison also shows that there are relatively higher concerns in accommodation sharing and crowdfunding and particularly weak trust in platforms in the case of crowdfunding.

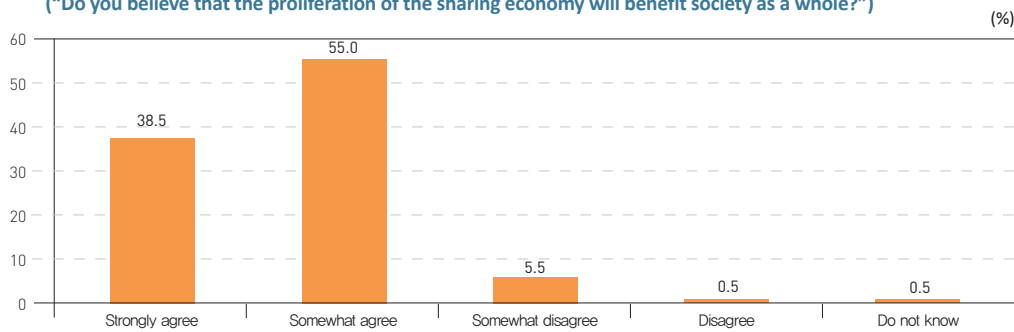
V . Policy Direction

The proliferation of the sharing economy is a global trend and is accompanied by diverse expected benefits such as the creation of new transactions, promotional and market testing opportunities, regional economic booms, reduction in environmental costs and so

9) Housing prices may rise due to the increasing demand for new residential buildings or officetels (multi-purpose buildings with residential and commercial units in Korea) for the primary purpose of accommodation sharing. Also, renters may decide to evict existing tenants for sharing businesses. San Francisco, New York and Berlin recently tightened regulations on accommodation sharing, addressing issues regarding housing instability.

10) When sharing involves human assets (e.g., talent sharing and car sharing), this could raise employment instability problems. To prepare for when such sharing transactions emerge in Korea, the government needs to be equipped with legal interpretations regarding the relationship between platform and supplier and policy countermeasures.

[Figure 4] Impact of the Sharing Economy on Social Welfare – Survey of Economists
 (“Do you believe that the proliferation of the sharing economy will benefit society as a whole?”)



Source: [Figure 1-6] from Kim, Lee and Hwang (2016).

on. However, there are also risk factors, including the crowding out of existing transactions and transaction and social risks. Then, will the introduction of the sharing economy enhance overall social welfare?¹¹⁾ This is very plausible if the risk factors are controlled properly, and many economists appear to share the same expectation. Indeed, 200 of Korea’s leading economists were asked whether the proliferation of the sharing economy could benefit the overall society when regulatory equity is achieved between sharing economy and existing suppliers, to which 93.5% answered positively (Figure 4).¹²⁾

To that end, the government must lay the institutional foundations to support the stable growth of the sharing economy, which will entail a new approach that takes into account its uniqueness. Although each sector differs in development status, prospect and key issues and thus require specific action plans, this study intends to suggest a general policy direction that could be applied across the spectrum.

First, let’s reconsider the definition of the sharing economy. In most cases, suppliers in the sharing economy, unlike those in the traditional economy, are non-professional and engage in transactions temporarily or irregularly. However, the existing regulatory system regards suppliers as professional business operators and as such, if the same regulations were applied to the sharing economy, non-professional individual suppliers will have difficulties in meeting the regulatory standards, which will, in turn, force them out of the market. This can inevitably cause consumers and suppliers to leave the market sequentially and irreparably damage the sharing economy.¹³⁾ However, to properly respond to the concern of conflict with existing businesses, the government should

In laying the institutional framework to support the stable growth of the sharing economy, the government must consider both the economy’s unique characteristics and regulatory equity.

11) Hwang (2016) presented the theoretical model analysis, according to which the sharing economy is more likely to improve social welfare: when there is no existing supplier; when the competition in the existing industry is weaker; and when the service quality of sharing transactions is better.

12) The survey was coordinated by the Public Opinion Analysis Unit of the Economic Information and Education Center at KDI. It was conducted on Nov. 18 2015 and included 200 experts in Korea: 132 economics professors from major universities and 68 fellows from economic research institutes.

13) The survey shows that in accommodation sharing and crowdfunding, only half the respondent suppliers answered positively about participating as a supplier if regulations are made to be similar to those for existing suppliers. This implies that there is a necessity for the government to differentiate regulations if it intends to bolster the sharing economy.

guarantee regulatory equity so that existing and sharing economy suppliers can compete on a level playing field.

Transaction volume-based regulations are recommended for the sharing economy.

When regulatory equity is considered in tandem with the unique characteristics of the sharing economy, regulations must be linked to the volume of transactions. In other words, a transaction limit should be set and those who exceed the limit should be categorized as ‘professional, regular operators,’ and be subject to traditional supplier regulations while those who do not are categorized as ‘non-professional, temporary operators’ and be subject to eased regulations. Existing suppliers wishing for less regulations can opt to reduce their transaction volume and new suppliers wanting to become regular operators can do so by meeting traditional regulatory requirements. Transaction volume-based regulations guarantee the respective suppliers’ autonomous right of choice while demanding them to pay the price for the benefit of eased regulations, i.e. reduced transaction volume.

Major countries such as the US and UK are the front runners in the sharing economy, but even they are in the incipient stages of institutionalization. Currently, institutionalization is most active for accommodation sharing, and as shown in <Table 5>, the process has been mainly carried out at the city level. Accommodation sharing is mostly restricted to

<Table 5> Institutionalization Status in Major Countries: Accommodation Sharing

City, Country	Registration · Authorization requirement	Rental period limit		Income tax on suppliers
		Condition ¹⁾	Permitted days per year	
San Francisco, US	Registration required	Host present	Unlimited	
		Host absent	90 days	
Santa Monica, US	Authorization required	Host present	Unlimited	Tax exemption for transaction volume of \$40,000 or lower
		Host absent	Illegal	
Paris, France	Not required ²⁾	120 days		
UK	Not required ³⁾	90 days		Tax exemption for transaction volume of £7,500 or lower
Amsterdam, Netherlands ⁴⁾	(Vacation rental) Not required	60 days		
	(B&B) Registration required	Host present ⁵⁾	Unlimited	
	(Short stay) Authorization required	180 days		
Hamburg, Germany	Not required ⁶⁾	Host present ⁷⁾	Unlimited	
		Host absent	180 days	
Catalonia (Barcelona), Spain ⁸⁾	Authorization required	4 months		

Note: 1) The conditions for host present or absent indicates whether or not the host resides on-site during the guests’ stay. So, host present means that only a part of the host’s residence is shared.

2) Authorization is required for rental in some regions and the rental of non-residential facilities.

3) Authorization is required for stays if the maximum days of rental is exceeded.

4) Short stay corresponds to the rental of minimum seven days at a time. In all cases, up to four guests are allowed at a time. In the case of tenants, vacation rental is possible only with permission from the home owner.

5) A host must occupy 60 percent or more of the total residential area.

6) Authorization is required for rental of residential assets other than the primary residence.

7) No limit on rental period for guests occupying less than 50% of the total residential area.

8) Maximum of two bedrooms for up to five guests per room.

Source: Based on Section 5 and Appendix 2-4 from Lee and Kim (2016).

residential areas and buildings and to main occupants, and transaction volume-based regulations are being imposed. In all cases, the host must reside on-site during the guests' stay (meaning only a part of the host's residence can be shared) or the the total period of renting through accommodation sharing must be limited to 60-180 days per year. Also, tax regulations in some countries are linked to the transaction volume and those with fewer transactions are given tax exemptions on their rental income. If their transaction volume is below the limit and thus classified as 'supplier in accommodation sharing,' they will be subject to relaxed regulations on registration or authorization requirements, fire safety requirements, taxes and so on than existing accommodation operators.

The enforcement of transaction volume-based regulations involves difficulties. To ensure effectiveness, regulators would need information on the transaction volume of respective suppliers. However, sharing economy suppliers have an incentive to under-report their transaction volume in order to benefit from the eased regulations. Besides, it is very difficult for regulatory authorities to identify false reports and violations from the huge number of suppliers and impose meaningful sanctions, incurring excessive administrative costs. Even major countries with more advanced systems for accommodation sharing have yet to establish effective enforcement means for transaction volume-based regulations. Instead, some cities have simply attempted temporary measures such as reserving accommodation at suspected operators' offerings and conducting surprise inspections.

Accordingly, to strengthen the effectiveness of transaction volume-based regulations, certain obligations must be imposed on sharing platforms. Since such platforms possess detailed data on all sharing transactions and have a relatively low incentive to report falsely, sharing platforms should be obligated to regularly submit relevant transaction information, on behalf of the suppliers, to the government. Once registration and taxation standards for sharing economy participants are set, sharing platforms can also operate online services through which suppliers can register with the government before initiating transactions, or that enables withholding income and consumption taxes of each transaction. This could significantly cut administrative costs and secure regulatory effectiveness. In San Francisco, where the institutionalization of accommodation sharing is most advanced, the so-called "Airbnb law" was adopted in 2015 and after several revisions since, the city is now imposing some obligation on sharing platforms.

Next, transaction risks can be basically resolved somewhat via market mechanisms such as the self-regulation of platforms and collective intelligence. The profit of sharing platforms relies on the transaction volume via the platform, meaning that there is incentive to create a reliable environment with low transaction risks to safeguard their users. In fact, there are a number of studies confirming that sharing platforms and their participants are working together to regulate consumers and suppliers voluntarily and to reduce transaction risks significantly through various means such as reviews, reputation and ex-ante screening by self-operated or third-party verification agencies.¹⁴⁾ In this

To strengthen the effectiveness of transaction volume-based regulations, certain obligations must be imposed on platforms.

As for transaction risks, government policies need to play a supplementary role while placing its focus on sharing platforms.

context, when dealing with these risks, government policies need to play a supplementary role while focusing on regulating platforms rather than the participants.

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14) Refer to Kim and Lee (2016) which empirically analyzed the transaction risks and role of market mechanisms in the market for lending-based crowdfunding in Korea.